#### Cited Reference 5

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(Open Date: February 12, 1991)

Japanese Patent Application No. 163661/1989

(Filing Date: June 28, 1989)

Applicant: Osaka Aerosol Industries Co., Ltd.

Title of Invention: Post Application Foaming Gel Composition

Disclosure A: (Page 1, left lower column 3 to right lower column 7)
"2. Claims

- 1. A post-application foaming gel composition which comprises a gelling agent 0.01 to 5% by weight, a surfactant 0.01 to 5% by weight, water 40 to 98% by weight, a post-foaming agent 0.05 to 20% by weight, and/or which comprises further adding an active component 0.1 to 10% by weight, an alcohol 5 to 50% by weight, characterized in that said composition is maintained in a gelatinous state at least for 30 seconds at a normal temperature and under atmospheric pressure, when a shearing stress was added to hair, the composition foams, and when the shearing stress was continuously added, the composition destroys the foam in a short time."
- 2. The post-foaming gel composition according to claim 1 wherein the gelling agent is carboxyvinyl polymer, the surfactant is a nonionic form of HLB10 or above, the post-foaming agent is at least one selected from isopentane, normal pentane, isobutene, normal butane, propane and dimethyl ether, and in case where alcohol is contained, the alcohol is monohydric alcohol."
- 3. The post-foaming gel composition according to any one of claims 1 and 2 wherein the post-foaming agent comprises 80 % by weight or above of the component selected from isopentane and normal pentane and less than 20 % by weight of the component selected from isobutene, normal isobutene, propane and dimethyl ether."

## JP 03-031389 A

## PATENT ABSTRACTS OF JAPAN

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(71)Applicant: OSAKA AEROSOL IND (21)Application number : **01-163661** 

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# (54) AFTER-FOAMABLE GEL COMPOSITION

# (57) Abstract:

PURPOSE: To obtain a new gel composition showing after-foaming properties not containing soap, free from greasiness at all after use, comprising a gelatinizing agent, surfactant, water, after-foaming agent, etc., in a specific ratio.

CONSTITUTION: The title composition which contains (A) 0.01-5wt.% gelatinizing agent comprising preferably a carboxyvinyl polymer, (B) 0.01-5wt.% nonionic surfactant having preferably >10 HLB, (C) 40-98wt.% water, (D) 0.5-20wt.% after-foaming agent consisting of preferably (i) ≥80wt.% component comprising isopentane and/or n-pentane and (ii) \( \leq 20\text{wt.}\%\) component selected from isobutane, n-butane and dimethyl ether and optionally (E) 0.1-10wt.% active component and (F) 5-50wt.% alcohol, maintains a gelatinous state at normal temperature under atmosphere for ≥30 seconds, foams by applying shear stress to the composition and destroys foams in a short time by continuing application of shear stress.